

## **Historic, archived document**

Do not assume content reflects current scientific knowledge, policies, or practices.



1.9  
En 833

E-50.

UNITED STATES DEPARTMENT OF AGRICULTURE,  
BUREAU OF ENTOMOLOGY,  
WASHINGTON, D. C.



FOREST ENTOMOLOGY. 15

May 12, 1916.

Brief Information on the  
RED SPIDER and ITS CONTROL.

**Character and Extent of Damage.** - During a protracted drought the red spider is likely to become very injurious, attacking a great variety of plants. Whole trees, especially seedlings and nursery stock, are apt to have their foliage killed by it.

**Evidence of Infestation.** - Pale, brownish spots which may later cover the foliage of the entire plant and a web sometimes so dense as to be plainly visible at a considerable distance appear on the leaves. On examination with a magnifying lens the affected leaves are found bearing numerous, tiny, pearl-like eggs, brownish or reddish little creatures running about, or the glistening empty egg shells and cast skins of the mites.

**Seasonal History and Habits.** - "Red spider" is the name most often applied to two species of web-spinning mites. Mites differ from true insects in having four pairs of legs in the adult stage. They pass the winter as adult females on various wild plants. In the spring they ascend plants and start egg laying at the rate of 5 to 10 eggs per day for a period of 8 to 12 days. During hot, dry weather the eggs hatch, in about 4 days after having been laid, into young mites which commence feeding almost immediately. They reach maturity in 10 to 14 days after hatching, depending on the season and locality. Many generations follow one another in course of one summer. Usually, by the time their presence is discovered they are already very numerous. They live and feed in colonies and their feeding consists in sucking the juices from leaves.

**Remedies.** -

A stiff stream of water, frequently applied, will rid plants of red spider in many cases.

Individual trees of the kinds that expose most of both surfaces of their leaves to the sun, dust with powdered sulphur.

Flour paste prepared as follows:

(Small quantity). Cook  $\frac{1}{2}$  lb. of flour in 1 qt. of water until it becomes a uniform paste, then pour into 2-3 gallons. of water.

(Large quantity). 8 gallons. of paste (1 lb. flour to 1 gall. water) to 100 gallons. of water.

Spray with tin atomizer or power pump, depending on area to be treated. Make at least two applications with a 7-day interval between them.

A. D. HOPKINS,

Forest Entomologist.

1981, 11 July

Dear Mr. and Mrs. Gandy,

I am writing to you today to thank you for your kind gift of \$50.00 which I received yesterday. This will go a long way towards helping me to complete my degree at the University of Alberta.

I am currently in my final year of study, and I am working hard to finish my degree. However, I am facing some financial difficulties due to the high cost of tuition and living expenses. Your gift has provided me with much-needed financial support, and I am very grateful for your generosity.

I would like to express my sincere appreciation for your support and encouragement. Your gift has given me the confidence to continue my studies and pursue my dreams. I am looking forward to finishing my degree and starting my career.

Thank you again for your kind gift. I hope you have a wonderful day.

Yours sincerely,

John Smith